

Listing of Claims

Below is a listing of the presently pending claims in this application:

Listing of Claims

1. (Original) A normally open pressure-operated fluid valve, comprising:
 - a) a body having a fluid inlet and a fluid outlet formed therein;
 - b) a valve seat in said body forming a closable flow path between said inlet and said outlet;
 - c) a housing extending from said valve seat and having a cavity therein, the end of said cavity proximate to said valve seat being sealingly closed off by a flexible diaphragm;
 - d) said diaphragm being biased away from said valve seat by a fluid flowing in said flow path; and
 - e) said diaphragm being selectively biasable against said valve seat to stop the flow of fluid in said flow path by pressurizing said cavity with a pressure medium.
2. (Original) The valve of Claim 1, in which said pressure medium is compressed air at a pressure greater than the pressure of said fluid in said flow path.
3. (Original) The valve of Claim 2, in which fluid flow in said flow path is controlled by selectively connecting said cavity to a source of compressed air, connecting said cavity to atmosphere, or blocking air flow to or from said cavity.
4. (Original) The valve of Claim 2, in which said fluid in said flow path is water.

5. (Original) A method of converting a normally closed electric solenoid valve to a non-electrically operated normally open valve, said solenoid valve including a flow path through a valve seat, a housing extending from said valve seat, and a plunger normally spring-biased into valve-closing contact with said valve seat but retractable into a cavity in said housing by energizing a solenoid coil to open said valve, comprising the steps of:
- a) removing said spring-biased plunger;
 - b) modifying said housing to allow the selective introduction of a pressure medium into said cavity;
 - c) sealingly closing off said cavity from said flow path with a diaphragm sufficiently flexible to normally be pushed off said valve seat by the pressure of a fluid flowing in said flow path; and
 - d) selectively introducing a pressure medium into said cavity so as to bias said diaphragm into contact with said valve seat when it is desired to close the valve.
6. (Original) The method of Claim 5, in which said pressure medium is compressed air and said fluid is water.
7. (Original) The method of Claim 5, in which said solenoid coil is also removed.